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| FORM PTO-1390 (REV 10-2000) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTORNEY'S DOCKET NUMBER |
| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 | | | | U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 09/701861 |
| INTERNATIONAL APPLICATION NO. PCT/CB99/01766 | INTERNATIONAL FILING DATE 3/6/1999 | PRIORITY DATE CLAIMED 3/6/1998 | | |
| TITLE OF INVENTION METHOD AND APPARATUS FOR ACCESSING WEB SITES VIA THE INTERNET | | | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | | | |
| <ol style="list-style-type: none"> <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. <input type="checkbox"/> This is an express request to promptly begin national examination procedures (35 U.S.C. 371(f)) <input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (PCT Article 31). <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). <input checked="" type="checkbox"/> has been communicated by the International Bureau. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> <input checked="" type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). <input type="checkbox"/> have been communicated by the International Bureau. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. <input type="checkbox"/> have not been made and will not be made. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | | | | |
| Items 11 to 16 below concern document(s) or information included: | | | | |
| <ol style="list-style-type: none"> <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. <input type="checkbox"/> A FIRST preliminary amendment. <input checked="" type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. <input type="checkbox"/> A substitute specification. <input type="checkbox"/> A change of power of attorney and/or address letter. <input checked="" type="checkbox"/> Other items or information: <ol style="list-style-type: none"> (A) STATEMENT CLAIMING SMALL ENTITY STATUS (B) DECLARATION FOR UTILITY OR DESIGN (C) GENERAL TRANSMISSION FORM (D) CREDIT CARD PAYMENT FORM | | | | |

| U.S. APPLICATION NO. (6 digits) 09/701861 | INTERNATIONAL APPLICATION NO. PCT/GB99/01766 | ATTORNEY'S DOCKET NUMBER | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|----------------------------------|-------------------|-------------------|------|--|--------------|-----------|--------------|----------|------------------|--------------------|----------|-------------|----------|------------------|--|--|--|-------------------|------------------|------------------------------------|--|--|--|-------------------|----|
| <p>17. <input type="checkbox"/> The following fees are submitted:</p> <p>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</p> <p>Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1000.00</p> <p>International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$860.00</p> <p>International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$710.00</p> <p>International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00</p> <p>International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00</p> | | CALCULATIONS PTO USE ONLY | | | | | | | | | | | | | | | | | | | | | | | | | |
| ENTER APPROPRIATE BASIC FEE AMOUNT | | \$ 860.00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).</p> | | \$ | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CLAIMS</th> <th>NUMBER FILED</th> <th>NUMBER EXTRA</th> <th>RATE</th> <th></th> </tr> </thead> <tbody> <tr> <td>Total claims</td> <td>29</td> <td>-20 =</td> <td>9</td> <td>X \$18.00</td> </tr> <tr> <td>Independent claims</td> <td>4</td> <td>-3 =</td> <td>1</td> <td>X \$80.00</td> </tr> <tr> <td colspan="3">MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td> <td>+ \$270.00</td> <td>\$ 270.00</td> </tr> <tr> <td colspan="4">TOTAL OF ABOVE CALCULATIONS</td> <td>\$ 1381.00</td> </tr> </tbody> </table> | | CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | Total claims | 29 | -20 = | 9 | X \$18.00 | Independent claims | 4 | -3 = | 1 | X \$80.00 | MULTIPLE DEPENDENT CLAIM(S) (if applicable) | | | + \$270.00 | \$ 270.00 | TOTAL OF ABOVE CALCULATIONS | | | | \$ 1381.00 | \$ |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | | | | | | | | | | | | | | | | | | | | | | | |
| Total claims | 29 | -20 = | 9 | X \$18.00 | | | | | | | | | | | | | | | | | | | | | | | |
| Independent claims | 4 | -3 = | 1 | X \$80.00 | | | | | | | | | | | | | | | | | | | | | | | |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) | | | + \$270.00 | \$ 270.00 | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL OF ABOVE CALCULATIONS | | | | \$ 1381.00 | | | | | | | | | | | | | | | | | | | | | | | |
| <p><input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.</p> | | \$ 690.50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>SUBTOTAL</p> | | \$ 690.50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).</p> | | \$ | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>TOTAL NATIONAL FEE</p> | | \$ 690.50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property</p> | | \$ | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>TOTAL FEES ENCLOSED</p> | | \$ 690.50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Amount to be refunded: | \$ | | | | | | | | | | | | | | | | | | | | | | | | |
| | | charged: | \$ | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p><input checked="" type="checkbox"/> CREDIT CARD (See CREDIT CARD PAYMENT FORM)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>SEND ALL CORRESPONDENCE TO:</p> <p>ROBERT KAPLAN 4 CRESWICK WALK LONDON NW11 6AN UK</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p> SIGNATURE: ROBERT KAPLAN NAME</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>REGISTRATION NUMBER</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(b))—INDEPENDENT INVENTOR

Docket Number (Optional)

Applicant, Patentee, or Identifier: ROBERT KAPLANApplication or Patent No.: (PCT/LTB99/01766

Filed or Issued: _____

Title: METHOD AND APPARATUS FOR ACCESSING WEB SITES VIA THE INTERNET

As a below named inventor, I hereby state that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees to the Patent and Trademark Office described in:

the specification filed herewith with title as listed above.

the application identified above.

the patent identified above.

I have not assigned, granted, conveyed, or licensed, and am under no obligation under contract or law to assign, grant, convey, or license, any rights in the invention to any person who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

No such person, concern, or organization exists.

Each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern, or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

ROBERT KAPLAN

NAME OF INVENTOR

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Signature of Inventor26/11/2000
Date

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Signature of Inventor

Date

NAME OF INVENTOR

Signature of Inventor

Date

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METHOD AND APPARATUS FOR ACCESSING
WEB SITES VIA THE INTERNET

The present invention relates to an information transfer system. In particular the present invention relates to novel methods and apparatus for facilitating transfer of information from Internet web sites to other computer terminals.

In recent times the amount of information available and the number of available sources of information has increased dramatically. A problem with the increasing volume of information and sources of information is that it is now difficult for information providers, such as advertisers to ensure that individuals obtain relevant information from them.

In particular, one source of information which has grown dramatically in recent years are web sites on the Internet. Although to a certain extent search engine programs automate the process of searching for web sites, the success of a search engine program is dependent upon the key words used for a search. If the key words are insufficiently specific too many candidate web sites will be returned and the number of pages to be considered will not be reduced to manageable proportions. If the search criteria are overly specific, sites of interest may not be found.

The present invention aims to provide a information

transfer system for facilitating the retrieval of information from predetermined web sites via the Internet.

In accordance with one aspect of the present invention, there is provided a computer network addressing system for accessing a web site, the system comprising reading means for reading address data from a document; interpretation means for interpreting address data read by said reading means; and linking means for forming a communication link to a web site, said linking means forming said communication link based upon said address data as interpreted by said interpretation means.

In a further aspect of the present invention provides an information retrieval system by which individuals are directed towards relevant information through the distribution of documents having associated therewith a data carrier having address data recorded thereon. The document could be for example an advertising leaflet or a magazine or newspaper or other periodical. When individuals are in possession of such documents they can obtain relevant information by causing the address data recorded on the data carrier to be read by a reader which causes a browser program to access a corresponding web site.

In accordance with another aspect of the present invention there is provided a computer apparatus for obtaining information, said apparatus comprising:

a reading device for reading address data from a document and a computer having a browser stored therein for creating a communications link on the basis of read-in address data.

5 Embodiments of the present invention will be described by way of example with reference to the accompanying drawings, in which:

10 Figure 1 is a block diagram for illustrating an information transfer system in accordance with the present invention;

Figure 2 is a schematic diagram illustrating a leaflet having a swipe card attached;

Figure 3 is a schematic diagram of a swipe card;

15 Figure 4 is a schematic diagram of an addressing system in accordance with an embodiment of the present invention;

Figure 5 is a block diagram of the card reader of Figure 1;

20 Figure 6 is a flow diagram of the control program of the reading device of Figure 4;

Figure 7 is a block diagram of the memory of the computer of Figure 4;

25 Figures 8A and 8B are flow diagrams for explaining the flow of control of the computer programs stored in the computer of Figure 4;

Figure 9 is a schematic diagram of a computer network;

Figure 10 is a flow diagram of the flow of control of apparatus in accordance with a second embodiment of the present invention;

5 Figure 11 is a flow diagram of the flow of control of apparatus in accordance with a third embodiment of the present invention;

Figure 12 is a schematic diagram illustrating a document having a detachable swipe card; and

10 Figure 13 is a schematic diagram of a magazine with an associated swipe card.

Figure 1 is a block diagram of a system for facilitating the transfer of information from the web sites of advertisers such as companies or other organisations to others such as individuals who may be 15 interested in products and services offered.

The apparatus comprises a number of components which cooperate to effect the transfer of information, namely a number of advertising leaflets 1 each having attached thereto a swipe card having address data recorded thereon 20 and a number of user stations each comprising a card reader 3 and a computer 4 all having facilities for connecting to the Internet 5, and a number of remote servers 6 also connected to the Internet and having stored therein web sites which may be of interest to the 25 individuals.

In use of the invention, an advertiser wishing individuals to access his web site distributes

advertising leaflets 1 having cards 2 thereon to individuals in a conventional manner, such as by being distributed by post or by being handed out inside a shop. When a user is in possession of an advertising leaflet 5 1 having a swipe card 2 attached the user detaches the swipe card 2 from the leaflet 1 and passes the swipe card 2 through the card reader 3. The address data stored on the swipe card 2 is then read by the reader and transferred to a browser program stored within the 10 computer 4. This causes the computer 4 to download web site information from the server 6 corresponding to the address data read from the swipe card 2. In this way by distributing advertising leaflets having attached thereto swipe cards 2 to a plurality of users each having a 15 computer 4 and a card reader 3 an advertiser can direct users to relevant information stored within a remote server 6.

Figure 2 is a schematic diagram illustrating one of the leaflets 1 having a swipe card 2 attached thereto. 20 The leaflet 1 comprises a conventional advertising leaflet being a paper substrate on which is printed advertising matter. The swipe card 2 attached to the leaflet 1 is attached to the paper substrate of the advertising leaflet by means of glue 7. The glue 7 is 25 such as to permit a user to remove the swipe card 2 from the advertising leaflet 1 without damaging the card 2.

Figure 3 is a schematic diagram of a swipe card 2

in accordance with this embodiment of the present invention, which has been separated from a leaflet 1. The swipe card 2 comprises a substrate 8 such as a plastic, paper or card substrate supporting thereon a 5 magnetic strip 9. Recorded on the magnetic strip 9 is machine readable data for recording the web address or Universal Resource Locator (URL) of a web site stored in a remote server 6 from which information is to be obtained.

10 Figure 4 shows in detail a user station of Figure 1 for obtaining data from a remote server comprising a computer 4 and a card reader 3. The computer 4 of the user station is connected to the internet (not shown in Figure 4) via a communications network 12 such as a 15 telephone network and a modem 13. The computer 4 is also connected to the swipe card reader 3. The swipe card reader 3 comprises a first housing portion 15 and a second housing portion 16 connected to each other so as to define a slot 17 through which a swipe card 18 may be 20 passed.

 In using the present invention when a swipe card 2 having a magnetic tape 9 on which address data representative of a way of forming a communications link to a server recorded thereon is passed through the slot 25 17 of the card reader 3 the card reader 3 is arranged to read the address data from the magnetic tape 9. The address data is then transferred to the computer 2 which

causes a browser program to generate a communications link based on the address data as is described in detail below.

The processing of data passed from the swipe card reader 3 to the computer 4 is coordinated by a device driver program stored in the memory of the computer 4. The device driver may be loaded into the memory of the computer 2 either via a disc 21 and a disc drive 22 or alternatively may be downloaded from the Internet via the communications network 12 and the modem 13. Alternatively the device driver program may be pre-stored in the memory of the computer 4.

Figure 5 is a block diagram of the card reader 3 shown in Figure 4. The card reader 3 comprises a read head 50 which is arranged to read data from a magnetic strip 9 of a card 2 passed through the slot 17 of the reader 3. The read head 50 is connected to a conversion module 51 which is arranged to convert the signal generated by the read head 50 into a digital signal that can be stored in a data buffer 52 which is connected to the read head 50 via the conversion module 51 and a central processing unit (CPU) 53. The CPU 53 is also connected to a read only memory (ROM) 54 and an interface 55. The CPU 53 is arranged to process signals received from the conversion module 50, the data buffer 52 and the interface 55 in accordance with a program stored in the read only memory 54.

Figure 6 is a flow diagram illustrating the use of the card reader 3 of Figure 4.

When a swipe card 2 having address data such as a web site address or a Universal Resource Locator (URL) recorded on a magnetic strip 9, is passed through the slot 17 of the card reader 3, the data recorded on a magnetic strip 9 present on the swipe card 2 is read (s1) by the read head 50. The read head 50 then generates a signal which is passed to the conversion module 51.

10 The conversion module 51 decodes (s2) the signal generated by the read head 50 into a form which is suitable for storage in the data buffer 52. The decoded signal is transferred via the CPU 53 and stored in the data buffer 52.

15 When the CPU 53 detects that data has been received from the conversion module 51 and stored in the data buffer 52, this causes the CPU 53 to send (s3) a signal to the computer 4 via the interface 55 to inform the computer that data has been read by the read head 50 and 20 is currently stored in the data buffer 52.

The CPU 53 then in accordance with the program stored in the ROM 54 waits (s4) to receive a signal back from the computer requesting that the data stored in the data buffer 52 be transmitted to the computer 4 via the 25 interface 55.

When a signal requesting that the data stored in the data buffer 52 be transferred to the computer 4 is

received CPU 53 then causes the data to be transmitted (s5) to the computer 4 via the interface 55. Thus in this way the card reader 3 enables data read from a magnetic strip 19 on a swipe card 18 can be transferred 5 to the memory of the computer 4.

Figure 7 is a block diagram of the memory of the computer 4 of Figure 2. Stored in the memory of the computer 4 are a setup module 60, an initialisation module 65, an interface module 70 and a browser program 10 75. A portion 80 of the memory of the computer 4 is also available for storage of variables.

The setup module 60 comprises a program enabling a user to input into the computer 4 data indicative of where and which type of browser program 75 is stored in 15 memory. The initialisation module 65 comprises a program for starting the interface module 70 and the browser program 75 automatically when a signal is received from the card reader 3. The interface module comprises a program which enables data received from the card reader 20 3 to be used in the browser program 75. The browser program 75 is a standard browser program known in the art for forming communication links with remote servers and downloading data, such as Netscape or Internet Explorer.

Figures 8A and 8B are a flow diagram for describing 25 the flow control of the programs stored in the memory of the computer 4. When the computer 4 is initially switched on, the initialisation module 65 stored in

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memory is activated. This monitors (s10) the interface 55 of the card reader 3 to detect whether a signal has been received indicating that the data buffer 52 of the card reader 3 contains data.

5 When the initialisation module 65 receives a signal from the card reader 3 this causes the initialisation module to determine (s11) whether the interface module 70 has been activated. If the interface module 70 has not yet been activated the initialisation module 65 10 activates (s12) the interface module 70.

The initialisation module 65 then determines (s13) whether the browser program 75 has yet been activated. If the initialisation module 65 determines that browser program 75 has not yet been activated, the initialisation 15 module 65 activates the browser program 75 based upon the data previously input using the set up module 60 defining which browser program is available for activation and where the browser program 75 is stored. When the browser program 75 has been activated the initialisation module 20 65, the initialisation module 70 then passes control to the interface module 70.

The interface module 70 then sends a request (s15) to the card reader 3 to request that data stored in the data buffer 52 of the card reader 3 be downloaded into 25 the memory of the computer 4 via the interface 55 of the card reader 3. The interface module 70 then waits (s16) until data previously stored in the data buffer 52 of the

card reader 3 is received from the card reader 3. When the data previously stored in the data buffer 52 is received the data is then stored (s17) in the data storage portion 80 of the memory of the computer 4. The 5 interface module 70 then activates the address line of the browser program 75 and enters the data stored in the data storage portion of the memory 80 into the address line of the browser program 75 and then passes control to the browser program 75.

10 When control is passed to the browser program 75, the browser program then forms a link corresponding to the address data in the activated address line which now contains data which previously had been read by the card reader 3. The browser program 75 then downloads a web 15 site corresponding to the address, to enable a user to view the web site in the usual manner.

In the above description the operation of the card reader 3 and computer 4 of the present invention has been described in terms of a card reader 3 which reads and 20 stores data from a swipe card and a program within the memory of the computer 4 which coordinates and controls the transfer of data from the data buffer 52 of the card reader 3 to the memory of the computer for use within a browser program 75. It will however be appreciated that 25 the coordination of the transfer of data could be performed by the CPU 53 in accordance with a program stored within the ROM 54 within the card reader 3 itself.

In such an embodiment, when data has been decoded and read by the card reader 3, the card reader 3 would cause an instruction to be sent to the computer 4 to activate the browser program 75 stored in memory of the computer 5 4. The CPU 53 would then cause data stored within the data buffer 52 to be transferred to the computer 4 and stored in the address line of the activated browser program 75 which is instructed to form a link corresponding to the address line.

10 By providing a card reader 3 which itself contains the means for coordinating the transfer of data to a browser 75 the need for an initialisation module 65 and interface module 70 within the computer 4 is thereby avoided. The CPU 53 and ROM 54 provide means by which 15 an initialisation module 65 which is constantly active can be provided and hence reduces the overhead required for running such a program within the computer 4.

Prior to describing a second embodiment of the present invention, a computer network will be described 20 in which a computer can be connected to a number of servers in a number of different ways.

Figure 9 is a schematic diagram of a computer network. The computer network comprises a computer 10 which is connected to a communications network 20 via a 25 modem 30. The communications network 20 may comprise a telephone network or a network of ISDN lines or the like.

The communications network 20 connects the modem 30

directly to a number of servers 100,200,210. Each of the servers 100,200,210 connected directly by the communications network 20 is also connected to one another via the internet 300 to one another and also to 5 a number of servers 220,230 via the internet 300, which are not directly connected to the modem via the communications network 20.

When a user of the computer 10 wishes to download information from one of the servers 100,200,210 for which 10 a direct communications link exists the user can connect to the remote server via the modem 30 and the communications network 20 directly. This is achieved by a user causing the modem 30 to dial a number corresponding to the direct communications link to the 15 server 100,200,210 on the communications network 20. Alternatively, the user can connect the computer 10 to one of the servers 100,200,210 via the modem 30 and the communications network 20 and then be indirectly connected to any of the other servers 100,200,230 via the 20 Internet 300. This is achieved by a user instructing the modem 30 to dial a number corresponding to the communications link to one of the servers for which a direct communications link exists 100,200,210 on the communications network 20 and then making use of the 25 Internet 300 to transfer information between that server 100,200,210 and any of the other servers 200-230.

In this way if a direct communications link to a

server exists and a user is aware of that direct communications link, the user can obtain information from that server without needing to use the Internet 300. However, if no direct communications link exists or a 5 user is not aware of a direct communications link to a server the user can still obtain information from the servers 100, 200, 230 indirectly via a server 100 for which a direct connection is known and the internet 300.

A second embodiment will now be described. In this 10 second embodiment the apparatus is the same as has been previously described in relation to the first embodiment with the exception that the interface program 70 is modified. The present invention will now be described with reference to Figure 10 which is a flow diagram of 15 the processing of data read from the magnetic strip 9 of a swipe card 2 after it has been transmitted and stored in the data storage portion 80 of the memory of the computer 4 in a similar manner to that described in the first embodiment.

In this embodiment of the present invention the 20 magnetic strip 9 of the swipe card 2 is arranged to have recorded thereon data for either a web site address or a web site address and a telephone number for forming a direct communications link to a server. When data read 25 from the swipe card 2 has been transferred to the data storage portion 80 of the memory of the computer 4 the interface module 70 is arranged to determine (s20)

whether the data which has been received comprises data indicative of a web address or data indicative of a direct communications link. If the data is indicative of a web address the interface module 70 proceeds 5 (s18,s19) as has been described in relation to the first embodiment which will not be repeated here.

If however the data stored in the data storage portion of the memory 80 is determined to be indicative of a direct communications link, the interface module 70 10 causes (s21) the browser program 75 to form a communications link based upon the direct communications link data stored in the data storage portion 80 of the memory. The browser (s22) then forms a direct 15 communications link by causing the modem 13 to make a telephone connection on the basis of the direct communications link data and thereby avoid the need to form a connection to the identified web site via the Internet.

In this way if a dedicated communications link to 20 a server exists, by providing that data on the swipe card, a user can take advantage of that direct communications link although the user does not himself know of the existence of that link.

A third embodiment of the present invention will now 25 be described. This third embodiment is the same as the first embodiment with the exception that the interface program 75 is modified. This embodiment will now be

described with reference to Figure 11 which is a flow diagram of the processing of data read from the magnetic strip 9 of a swipe card 2 after it has been transmitted and stored in the data storage portion 80 of the memory 5 of a computer 4 as has previously been described in relation to the first embodiment.

In this embodiment of the present invention the magnetic strip 9 of a swipe card 2 is arranged to have recorded thereon identification data in addition to 10 address data.

When the data is downloaded from the data buffer 52 of the card reader 3 it is stored (s25) in the data storage portion 80 of the memory of the computer 4. The interface module 70 is then arranged to transfer (s26) 15 only the part of the data stored in the data storage portion 80 of the memory corresponding to address data to the browser program to cause (s27) the browser program to form a communications link as has already been described in relation to the previous embodiments of the 20 present invention.

When a communications link has been formed between the computer 4 and a remote server, the web site which is then downloaded from the remote server is arranged to include a program which causes the computer 4 to transmit 25 (s28) to the server the additional data stored in the data storage portion 80 of the memory of the computer 11.

In this way the remote server can be made aware of the

identity of the card which has caused a communications link to be formed with the server. The remote server is then arranged to transmit or not to transmit (s29) further data to the computer 4 on the basis of said 5 additional data.

Thus for example the server could be set up to restrict access to different web sites depending upon the identification data received. Alternatively, the remote server could have stored therein account data 10 corresponding to the identification data on a card and the server could be arranged to charge for the use of a web site by updating account data associated with the received identification data, based upon monitoring the continued access of a web site through the generated 15 communications link.

Although in the previous embodiment the present invention has been described in terms of the distribution of advertising leaflets other documents such as magazines, newspapers or other periodicals could be used 20 to distribute swipe cards. Figure 13 is a schematic diagram of a magazine 45 in an open position having a swipe card 46 which is ready for removal from the magazine. In this example the swipe card 46 is not attached to the magazine 45 but merely rests on the upper 25 surface of one of the pages of the magazine adjacent to the spine of the magazine. The swipe card 46 as recorded thereon address data for a web site. Printed on the page

of the magazine on which the swipe card 46 rests is an advert related to the information which appears on the web site to which the address data relates. By inserting a swipe card 46 within a magazine the swipe cards in 5 accordance with the present invention could be distributed in a similar manner to the distribution of magazines, newspapers or other periodicals. When the swipe card is delivered together with the magazine 45, newspaper or other periodical the swipe card 46, the 10 swipe card is held in place between the leaves of the magazine, newspaper or other periodical by means of friction. Once the magazine, newspaper or other periodical has been delivered, the swipe card 46 can then be removed and used in the manner previously described.

15 Although in relation to the above embodiments the distribution of swipe cards attached to advertising leaflets by means of glue and distribution by associating documents with newspapers, magazines or other periodicals has been described alternative means of attachment and 20 distribution could be used. Figure 12 is a schematic diagram of another document having a swipe card attached thereto. In this example the document comprises a paper substrate 41 having a row of perforations 42 defining the upper edge of a lower detachable portion 43. The lower 25 detachable portion 43 has provided thereon a magnetic strip 44 which has address data recorded thereon. When a user receives a document having a detachable swipe card

the user can separate the detachable portion 43 from the remainder of the paper substrate 41 by tearing along the perforations 42. Documents having a detachable portion to act as a swipe card could be distributed by post or 5 any other conventional manner. Other documents such as magazines having pages with detachable portions for use as swipe cards could also be used as a way of distributing swipe cards having address data recorded thereon.

10 Alternatively instead of attaching or associating a swipe card with another document the swipe card itself could be distributed on its own. For example the swipe card could be printed in the manner of a business card and distributed in the same way as a business card in 15 business meetings. In this way, by distributing business cards having magnetic strips carrying address data or data recorded in other readable form, it would be possible for business people to distribute cards directing customers to the business' web site to obtain 20 further information about their products for example.

It will also be appreciated that instead of providing a card reader for reading data recorded on a card a document reader could be provided to read printed address data appearing directly on a portion of the 25 document. It will be appreciated that machine readable address data recorded on a portion of a document could be read directly from the document by a reader without

that portion of the document being detached from the remainder of the document.

The embodiments of the present invention enable individuals to access web sites more easily since a web address no longer needs to be manually input. The present invention may also be used to access search engines or Internet 'portals' which may themselves be used to access further web sites.

It will also be appreciated that although the present invention has been described in terms of obtaining information from web sites, the present invention could also be applied to transferring information by e-mail.

By providing swipe cards having address data corresponding to direct communications links, a means is provided to identify those dedicated connections to users and so improve the ability of users to take advantage of such links.

By providing swipe cards having identification data in addition to address data, a means is provided for servers to identify who is accessing their web site. A provider of a web site can then either restrict access to those sites to appropriate individuals or alternatively use the identification data to cause charges to be made to an account corresponding to a card and thereby charge for access to a web site.

Where charges are to be made for a web site the

swipe cards could be sold and a server could merely deduct credit for access to a web site from a central account associated with the identification data on a card until the total credit on a card has been exhausted. If 5 a user then wished to continue to access a web site the user would then be obliged to purchase a new card. If the identification number on a swipe card were to be detected or the card to be lost, an individual's loss would be limited to the amount of credit for which the 10 card has been purchased. The present invention therefore provides a means for charging for internet access which overcomes the problems involved due to individuals reluctance to transmit credit card numbers across the internet.

15 Although reference has been made in the specification to the use of swipe cards having data recorded on a magnetic strip it will be appreciated that in addition to recording data on a magnetic strip on a card magneto-optical or optical methods could also be 20 used. It will also be appreciated that any suitable type of document reader could be used such as a barcode reader or a smart card reader.

25 Although the embodiments of the invention described with reference to the drawings comprise computer apparatus and processes performed in computer apparatus, the invention also extends to computer programs, particularly computer programs on or in a carrier,

adapted for putting the invention into practice. The program may be in the form of source or object code or in any other form suitable for use in the implementation of the processes according to the invention. The carrier 5 be any entity or device capable of carrying the program.

For example, the carrier may comprise a storage medium, such as a ROM, for example a CD ROM or a semiconductor ROM, or a magnetic recording medium, for example a floppy disc or hard disk. Further, the carrier 10 may be a transmissible carrier such as an electrical or optical signal which may be conveyed via electrical or optical cable or by radio or other means.

When a program is embodied in a signal which may be conveyed directly by a cable or other device or means, 15 the carrier may be constituted by such cable or other device or means.

Alternatively, the carrier may be an integrated circuit in which the program is embedded, the integrated circuit being adapted for performing, or for use in the 20 performance of, the relevant processes.

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CLAIMS

1. Apparatus for transferring or requesting data via a communications network, said apparatus comprising:

5 a computer adapted to be connected to a communications network, said computer having stored thereon a plurality of programs for requesting or transferring data via said communications network;

a reader for reading data from a data carrier; and

10 a plurality of documents which are separate from said computers and said readers, said documents having associated therewith or attached thereto a data carrier which has recorded thereon data in a form readable by said reader;

15 characterised by further comprising:

selection means for interpreting data read from a said data carrier by said reader and selecting one or more programs from said plurality of programs stored on said computer on the basis of said interpretation;

20 transfer means for transferring data read from a said data carrier by said reader to said one or more selected programs; and

activation means for causing said one or more selected programs to transfer or request data via said communications network utilizing said data transferred by

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 said transfer means.

2. Apparatus for transferring or requesting data via a communications network, said apparatus comprising:

5 a computer adapted to be connected to a communications network, said computer having stored thereon a plurality of programs for requesting or transferring data via said communications network;

10 a reader for reading data from a data carrier; and
a plurality of documents which are separate from said computers and said readers, a portion of said documents comprising a data carrier which having recorded thereon data in a form readable by said reader;

characterised by further comprising:

15 selection means for interpreting data read from a said data carrier by said reader and selecting one or more programs from said plurality of programs stored on said computer on the basis of said interpretation;

20 transfer means for transferring data read from a said data carrier by said reader to said one or more selected programs; and

25 activation means for causing said one or more selected programs to transfer or request data via said communications network utilizing said data transferred by said transfer means.

AMENDED SHEET

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3. Apparatus in accordance with claim 1 or claim 2,
wherein said plurality of programs comprise a web
browser, wherein said selection means is arranged to
select said web browser when said reader reads website
address data from a said carrier, and said activation
means is arranged to cause said web browser to address a
website utilizing said website address data.

4. Apparatus in accordance with any of claims 1 to 3,
wherein said plurality of programs comprise an e-mail
program, said selection means being arranged to select
said e-mail program when said reader reads e-mail address
data from a data carrier, and said activation means is
arranged to cause said e-mail program to be arranged to
dispatch an e-mail message utilizing said e-mail address
data.

5. Apparatus in accordance with claim 3 or claim 4,
wherein said plurality of programs further comprise a
data dispatch program, said selection means being
arranged to select said data dispatch program when said
reader reads data for dispatch from a said data carrier,
and said activation means is arranged to cause said data
dispatch program to transmit said data for dispatch via
said communications network.

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6. Apparatus in accordance with any preceding claim, wherein said plurality of programs comprise a communications path selection program for selecting a communication path for transmitting data via said 5 communications network, said selection means being arranged to select said communication path selection program when said reader reads path selection data from a said data carrier and said activation means is arranged to cause said communications path selection program to 10 select a path for transmitting data via said communications network utilizing said path selection data.

7. Apparatus in accordance with any preceding claim, 15 wherein said reader is adapted to read data in magnetic form and said data is recorded on said data carriers in magnetic form.

8. An information carrier having recorded thereon means 20 for generating within a computer, activation means for causing said one or more selected programs to transfer or request data via said communicating network utilizing data transferred from a reader in accordance with any preceding claim.

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9. An information carrier in accordance with claim 8, having recorded thereon means for generating within a computer, selection means for interpreting data read from a data carrier by a reader and selecting one or more programs from said plurality of programs stored on said computer, on the basis of said selection.

10. An information carrier in accordance with claim 8 or claim 9, comprising a computer disc.

11. A computer disc in accordance with claim 10, wherein said computer disc comprises an optical, magneto optical or magnetic disc.

15. 12. An information in accordance with any of claims 8 or 9, comprising an electrical signal transferred via the Internet.

20. 13. A reader for reading data from a data carrier, said reader being adapted for connected to a computer adapted to be connected to a communications network, said reader comprising:
selection means for interpreting data read from a data carrier by said reader and selecting one or more programs from a plurality of programs for transferring or

requesting data via a communications network stored on said computer on the basis of said interpretation; and activation means for causing said one or more selected programs to transfer or request data via said communication network, utilizing said data read by said reader resulting in said selection of said programs by said selection means.

14. A reader in accordance with claim 13, wherein said selection means is arranged to select a web browser stored on a said computer when said reader reads website address data from a said carrier, and said activation means is arranged to cause said web browser to address a website utilizing said website address data.

15. A reader in accordance with claim 13 or 14, wherein said selection means is arranged to select an e-mail program stored on a said computer when said reader reads e-mail address data from a data carrier, and said activation means is arranged to cause said e-mail program to be arranged to dispatch an e-mail message utilizing said e-mail address data.

16. A reader in accordance with claim 14 or claim 15, wherein said selection means is arranged to select a data

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dispatch program for dispatching data stored on said computer when said reader reads data for dispatch from a said data carrier, and said activation means is arranged to cause said data dispatch program to transmit said data 5 for dispatch via said communications network.

17. A reader in accordance with any of claims 13 to 16, wherein said selection means is arranged to select a communication path selection program for selecting a 10 communication path for transmitting data via said communications network, when said reader reads path selection data from a said data carrier and said activation means is arranged to cause said communications path selection program to select a path for transmitting 15 data via said communications network utilizing said path selection data.

18. A reader in accordance with any of claims 13 to 17, wherein said reader is adapted to read data in magnetic 20 form.

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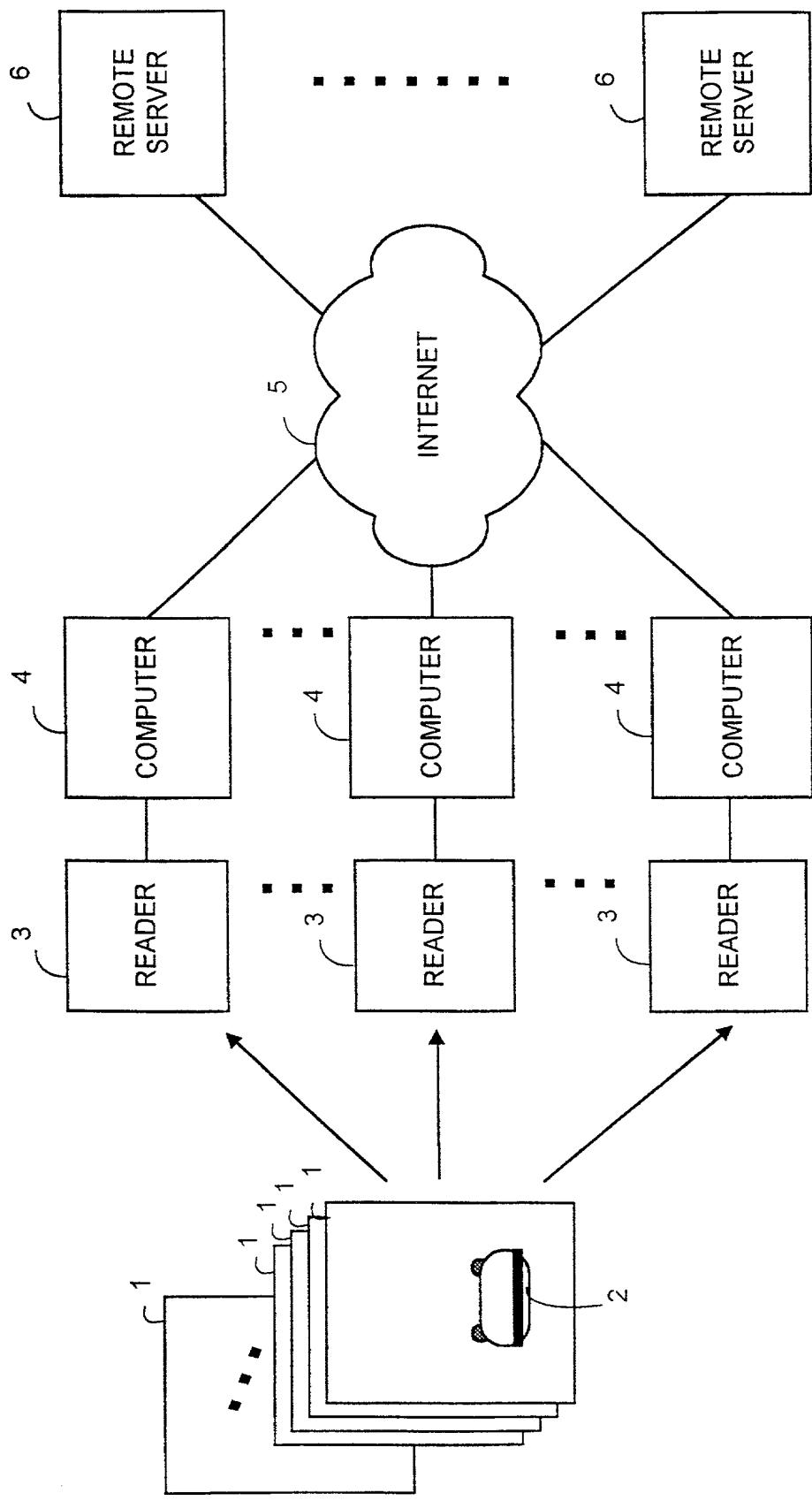


FIG. 1

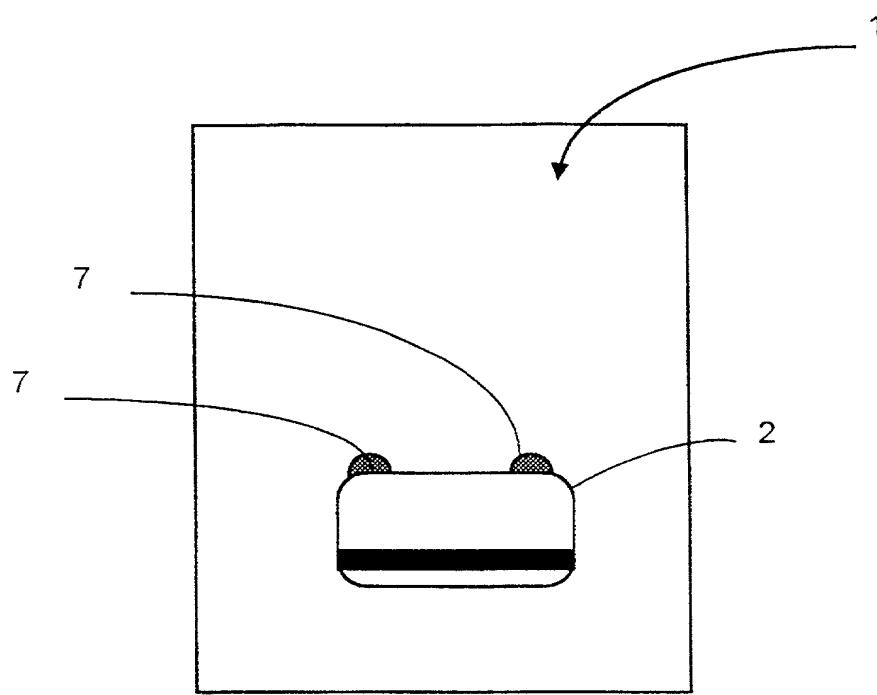


FIG. 2

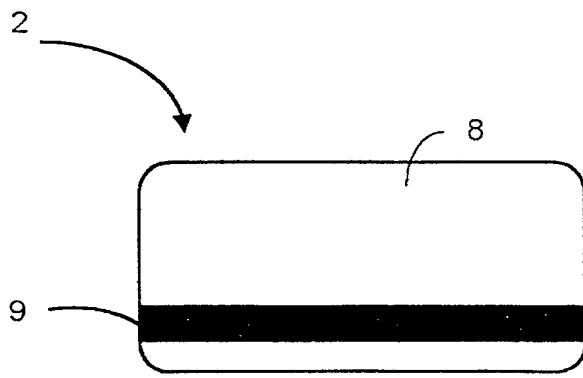


FIG. 3

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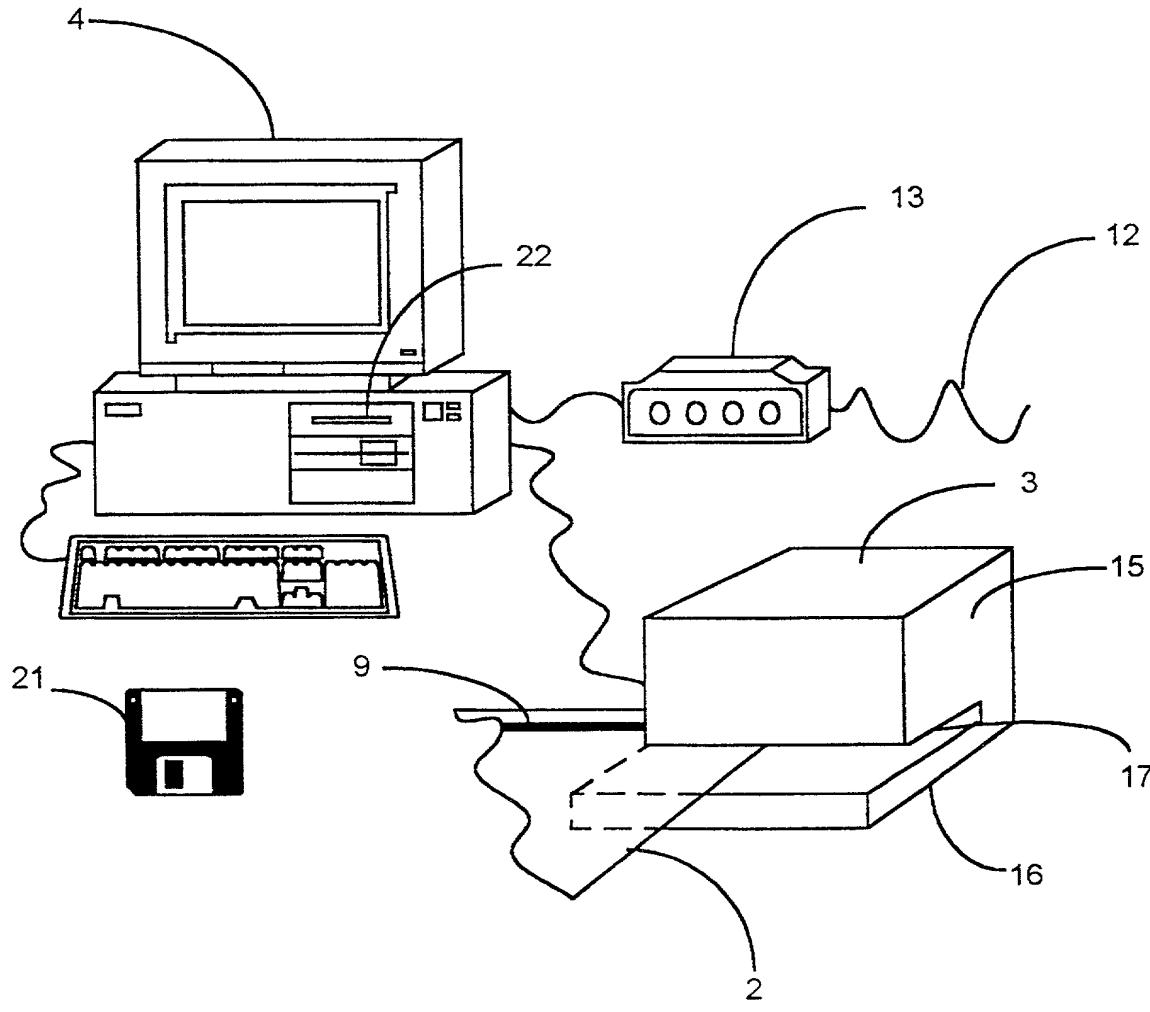


FIG. 4

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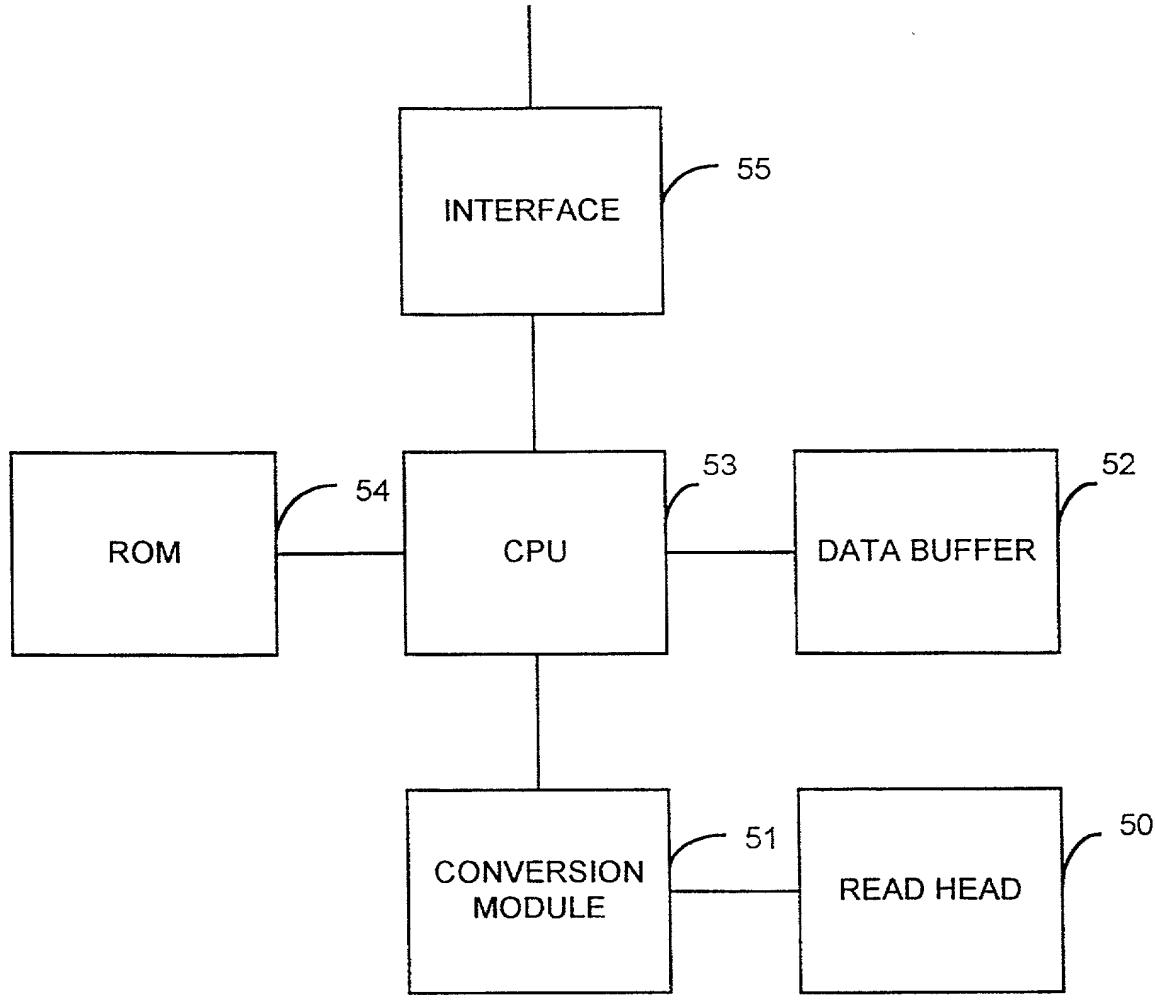


FIG. 5

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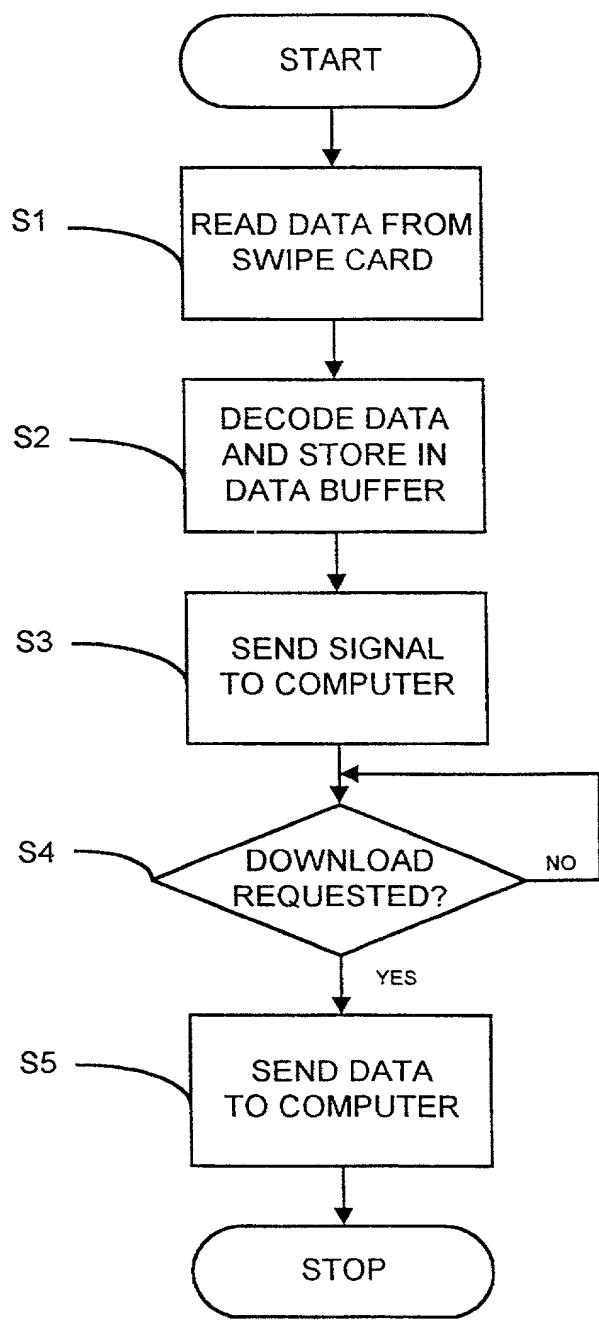


FIG. 6

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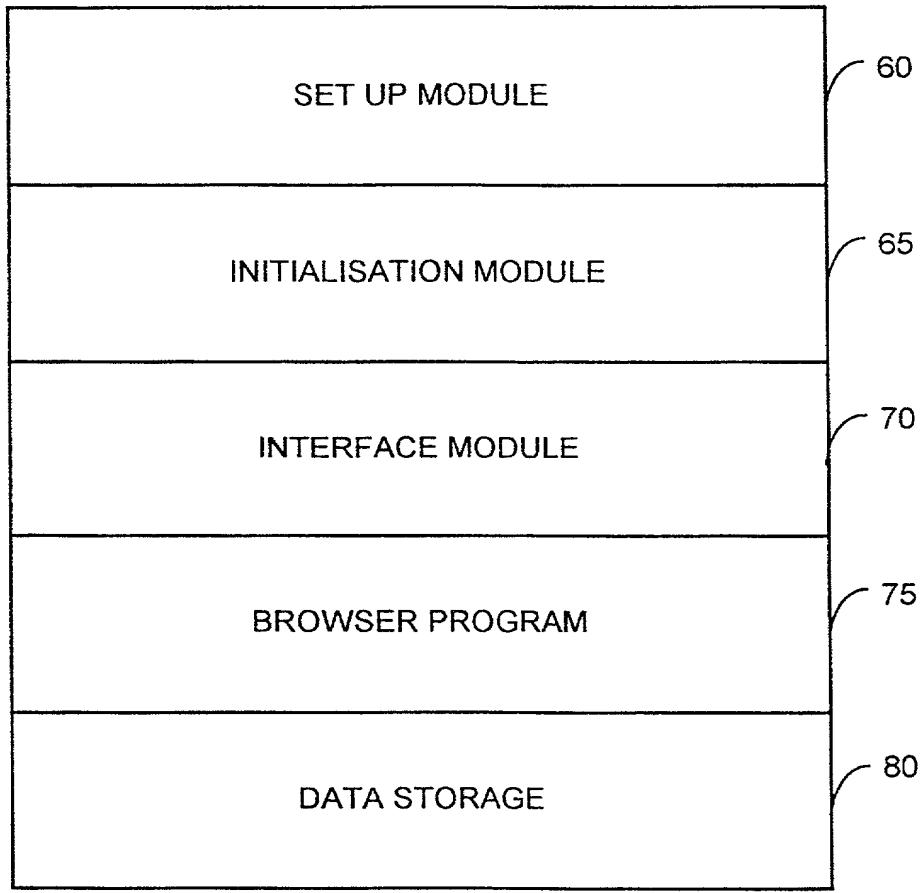


FIG. 7

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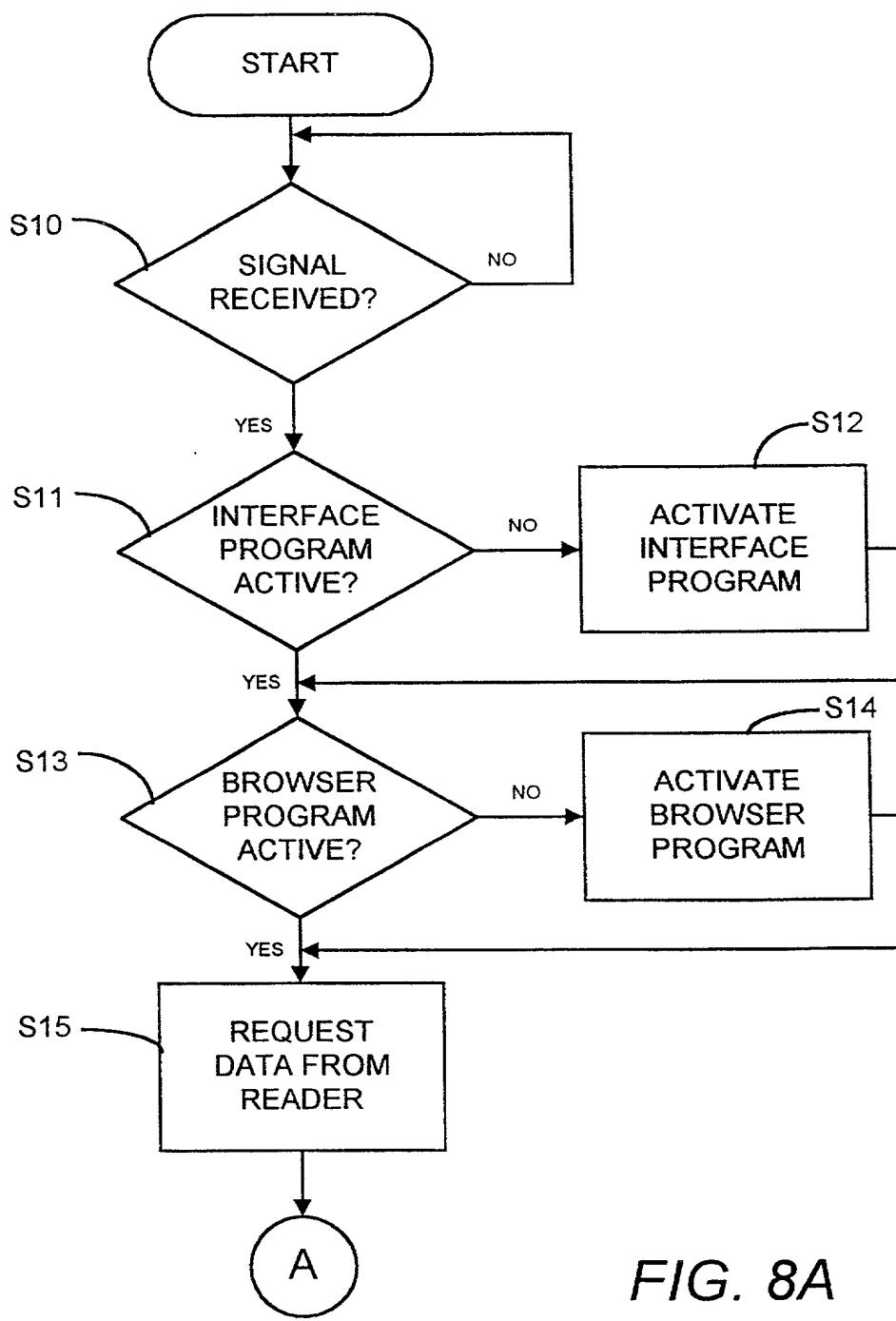


FIG. 8A

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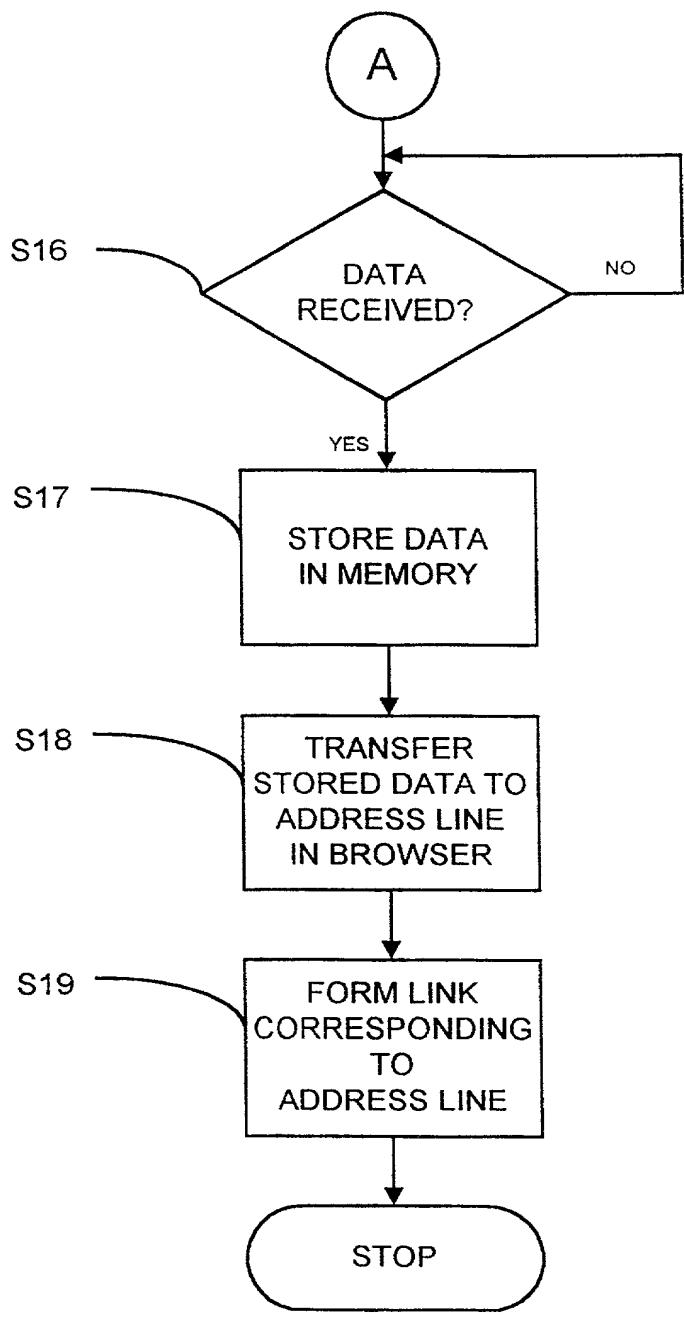


FIG. 8B

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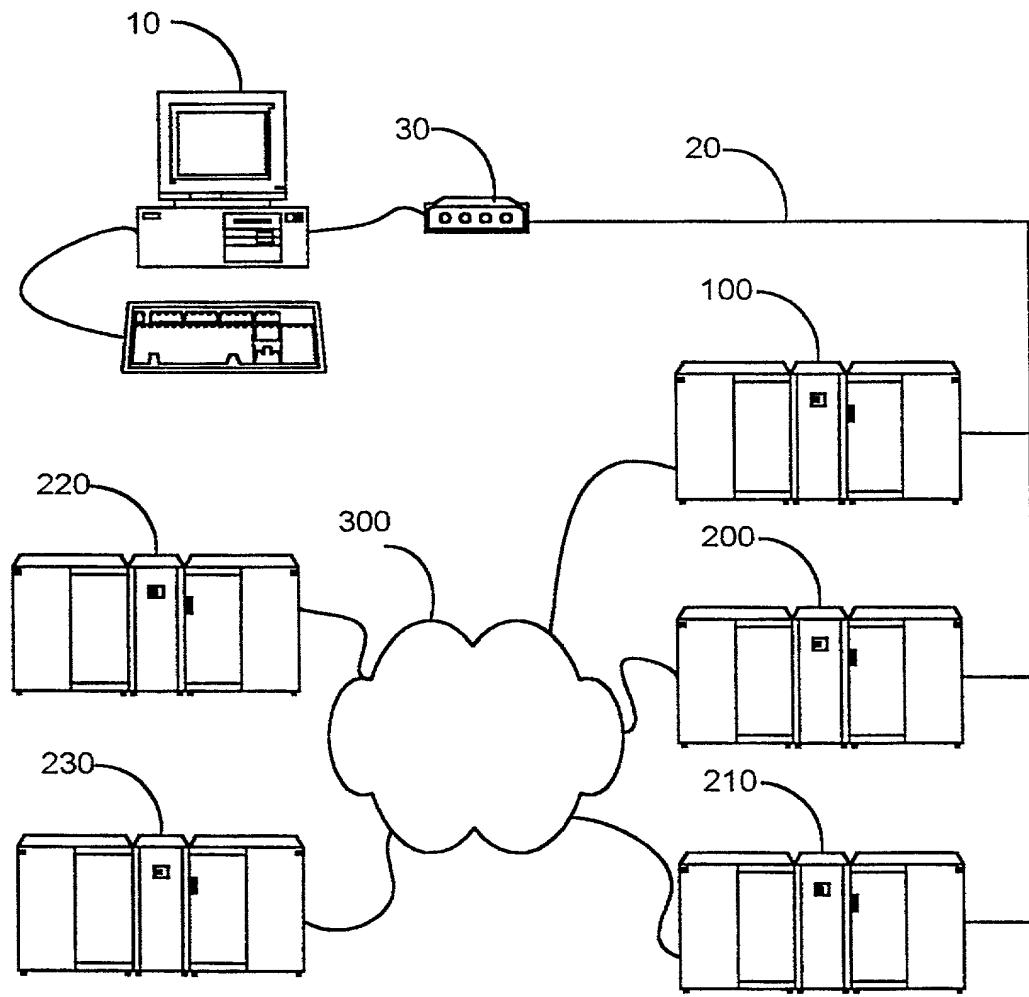


FIG. 9

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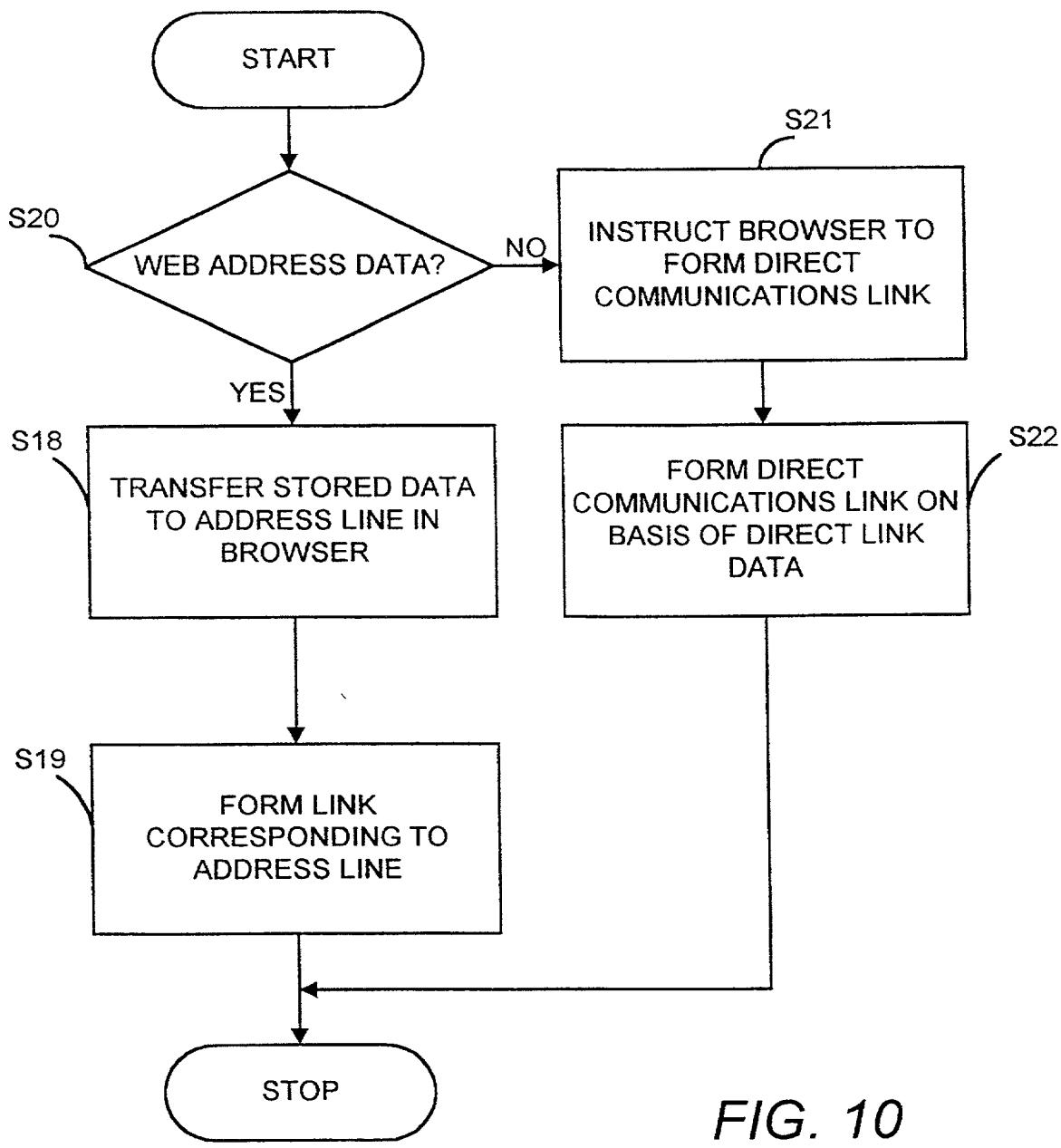


FIG. 10

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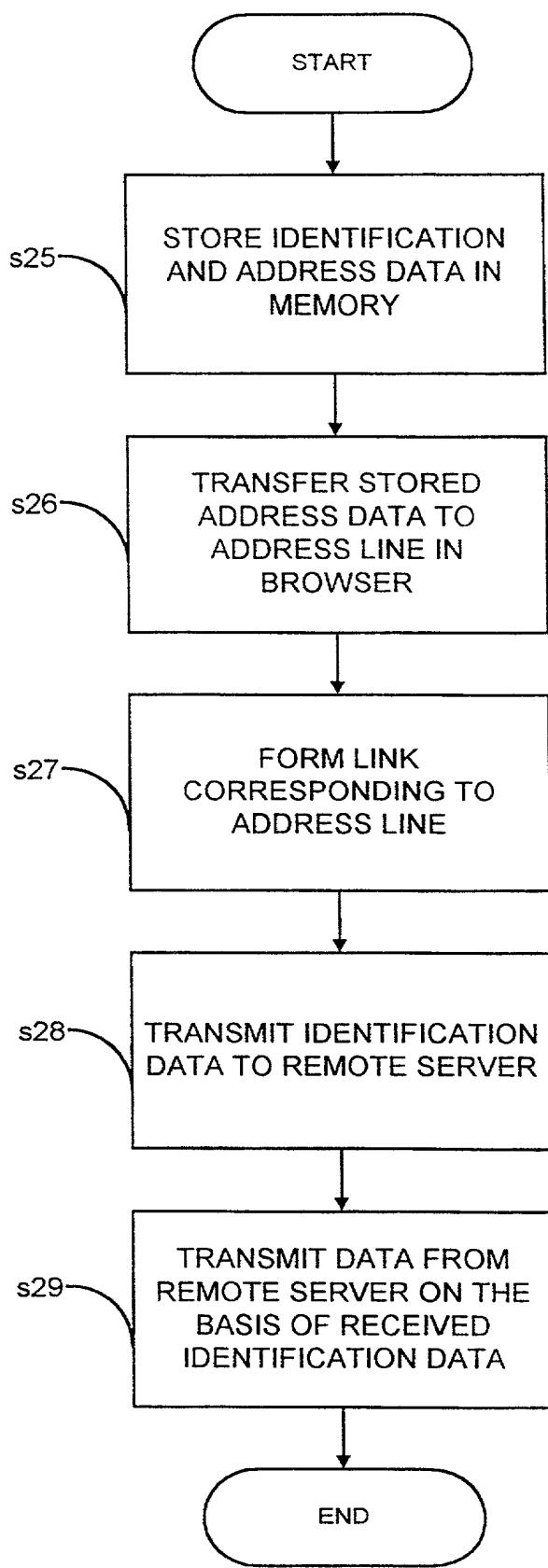


FIG. 11

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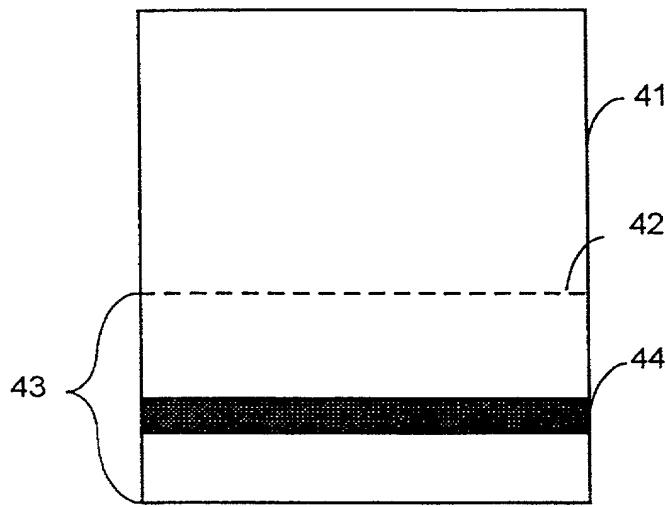


FIG. 12

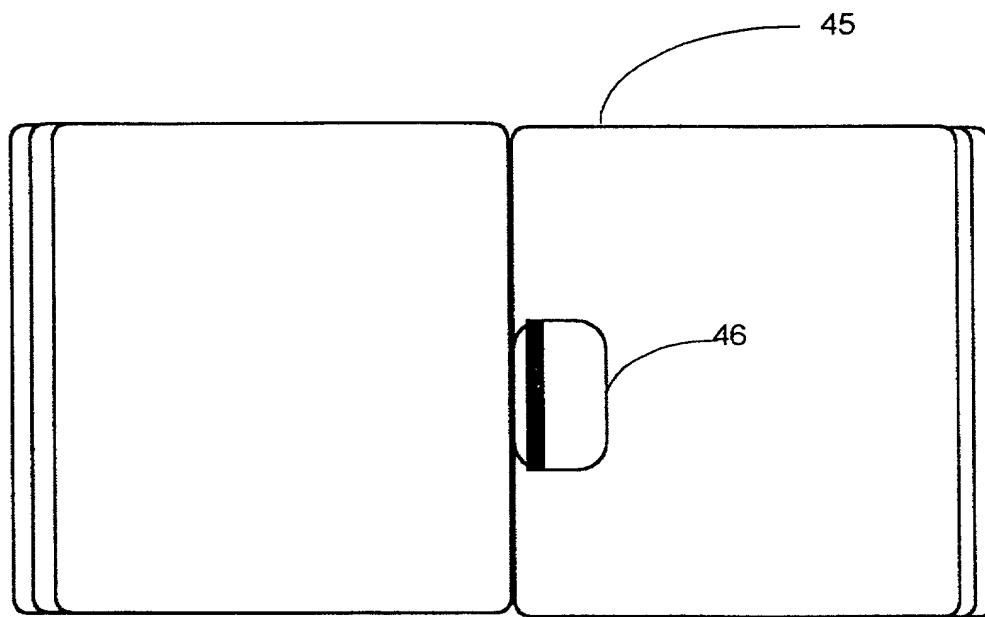


FIG. 13

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PTO/SB/01 (12-97)

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**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**

Declaration Submitted with Initial Filing OR Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

| | |
|---|---|
| Attorney Docket Number | |
| First Named Inventor ROBERT KAPLAN | |
| COMPLETE IF KNOWN | |
| Application Number | / |
| Filing Date | |
| Group Art Unit | |
| Examiner Name | |

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD AND APPARATUS FOR ACCESSING WEB SITES VIA THE INTERNET

the specification of which *(Title of the Invention)*

is attached hereto

OR

was filed on (MM/DD/YYYY) **3/6/1998** as United States Application Number or PCT International

Application Number **PCT/GB/01766** and was amended on (MM/DD/YYYY) **7/3/2000** (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application Number(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed | Certified Copy Attached? YES | Certified Copy Attached? NO |
|-------------------------------------|---------|----------------------------------|--------------------------|------------------------------|-----------------------------|
| 9811941.5 | GB | 3/6/98 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9814947.9 | GB | 9/7/98 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9908554.0 | GB | 14/4/99 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

| Application Number(s) | Filing Date (MM/DD/YYYY) | <input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto. |
|-----------------------|--------------------------|--|
| | | |

[Page 1 of 2]

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| U.S. Parent Application or PCT Parent Number | Parent Filing Date (MM/DD/YYYY) | Parent Patent Number (if applicable) |
|--|---------------------------------|--------------------------------------|
| PCT/GB/01766 | 3/6/00 | |

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As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Customer Number Registered practitioner(s) name/registration number listed below

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|------|---------------------|------|---------------------|
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| | | | |
|---------|------------------|-----------|-----------------|
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| Address | | | |
| City | London | State | ZIP |
| Country | GREAT BRITAIN | Telephone | 44 208 209 0210 |
| | | Fax | NW11 6AN |

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

A petition has been filed for this unsigned inventor

| | | | | | | |
|--------------------------------------|---|------------------------|---------|-----------------|---------|---------------|
| Given Name (first and middle if any) | | Family Name or Surname | | | | |
| ROBERT | | KAPLAN | | | | |
| Inventor's Signature |  | | | Date 26/11/2000 | | |
| Residence: City | London | State | Country | GREAT BRITAIN | | |
| Post Office Address | 4 CRIESWICK WALK | | | | | |
| Post Office Address | | | | | | |
| City | London | State | ZIP | NW11 6AN | Country | GREAT BRITAIN |

Additional inventors are being named on the supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto